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- 260 Climate of Las Vegas, Nevada. Paul H. Skrbac. December 1999
- 261 Climate of Los Angeles, California. David Bruno, Gary Ryan, with assistance from Curt Kaplan and Jonathan Slemmer. January 2000
- 262 Climate of Miles City, Montana. David A. Spector and Mark H. Strobin. April 2000
- 263 Analysis of Radiosonde Data for Spokane, Washington. Rocco D. Pelatti. November 2000
- 264 Climate of Billings, Montana. Jeffrey J. Zeltwanger and Mark H. Strobin. November 2000
- 265 Climate of Sheridan, Wyoming. Jeffrey J. Zeltwanger, Sally Springer, Mark H. Strobin. March 2001
- 266 Climate of Sacramento, California. Laura Masters-Bevan. December 2000 (7th Revision)
- 267 Sulphur Mountain Doppler Radar: A Performance Study. Los Angeles/Oxnard WFO. August 2001